

1627

#8 163



RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/677,152

DATE: 01/24/2002
TIME: 14:58:50

Input Set : A:\SEQUENCE LISTING.txt
Output Set: N:\CRF3\01242002\I677152.raw

ENTERED

SEQUENCE LISTING

C--> 2 (1) GENERAL INFORMATION:

3 (i) APPLICANT: Gallo, Robert C.
4 Bryant, Joseph
5 Lunardi-Iskandar, Yanto

C--> 6 (ii) TITLE OF INVENTION: Therapeutic Fractions of Sources of hCG

7 (iii) NUMBER OF SEQUENCES: 37

8 (iv) CORRESPONDENCE ADDRESS:

9 (A) ADDRESSEE: Intellectual Property/Technology Law
10 (B) STREET: P.O. Box 14329
11 (C) CITY: Research Triangle Park
12 (D) STATE: NC
13 (E) COUNTRY: USA
14 (F) ZIP: 27709

15 (v) COMPUTER READABLE FORM:

16 (A) MEDIUM TYPE: Diskette
17 (B) COMPUTER: IBM Compatible
18 (C) OPERATING SYSTEM: DOS
19 (D) SOFTWARE: PatentIn

20 (vi) CURRENT APPLICATION DATA:

C--> 21 (A) APPLICATION NUMBER: US/09/677,152

C--> 22 (B) FILING DATE: 02-Oct-2000

23 (C) CLASSIFICATION:

24 (vii) PRIOR APPLICATION DATA:

25 (A) APPLICATION NUMBER: PCT/US97/11210

26 (B) FILING DATE: 24-JUN-1998

27 (A) APPLICATION NUMBER: PCT/US97/11209

28 (B) FILING DATE: 24-JUN-1998

29 (A) APPLICATION NUMBER: PCT/US97/11448

30 (B) FILING DATE: 24-JUN-1998

31 (A) APPLICATION NUMBER: PCT/US97/11202

32 (B) FILING DATE: 24-JUN-1998

C--> 33 (A) APPLICATION NUMBER: USSN 09/220,415

C--> 41 (B) FILING DATE:

34 (viii) ATTORNEY/AGENT INFORMATION:

35 (A) NAME: Steven J. Hultquist

36 (B) REGISTRATION NUMBER: 28,021

37 (C) REFERENCE/DOCKET NUMBER: 4115-116

38 (ix) TELECOMMUNICATION INFORMATION:

39 (A) TELEPHONE: 919-419-9350

40 (B) TELEFAX: 919-419-9354

41 (2) INFORMATION FOR SEQ ID NO: 1:

42 (i) SEQUENCE CHARACTERISTICS:

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/677,152

DATE: 01/24/2002
TIME: 14:58:50

Input Set : A:\SEQUENCE LISTING.txt
Output Set: N:\CRF3\01242002\I677152.raw

RECEIVED
FEB 06 2002
TECH CENTER 160012900

```

43      (A) LENGTH: 539 base pairs
44      (B) TYPE: nucleic acid
45      (C) STRANDEDNESS: single
46      (D) TOPOLOGY: linear
W--> 47      (ii) MOLECULE TYPE: DNA
48      (ix) FEATURE:
49          (A) NAME/KEY: CDS
50          (B) LOCATION: 26..520
51      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
52 AGACAAGGCA GGGGACGCAC CAAGG ATG GAG ATG TTC CAG GGG CTG CTG CTG      52
53                               Met Glu Met Phe Gln Gly Leu Leu Leu
54                               -20                               -15
55 TTG CTG CTG CTG AGC ATG GGC GGG ACA TGG GCA TCC AAG GAG CCG CTT      100
56 Leu Leu Leu Leu Ser Met Gly Gly Thr Trp Ala Ser Lys Glu Pro Leu
W--> 57      -10      -5      1
58 CGG CCA CGG TGC CGC CCC ATC AAT GCC ACC CTG GCT GTG GAG AAG GAG      148
59 Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys Glu
60                               10                               15      20
61 GGC TGC CCC GTG TGC ATC ACC GTC AAC ACC ACC ATC TGT GCC GGC TAC      196
62 Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly Tyr
63                               25      30      35
64 TGC CCC ACC ATG ACC CGC GTG CTG CAG GGG GTC CTG CCG GCC CTG CCT      244
65 Cys Pro Thr Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro
66                               40      45      50
67 CAG GTG GTG TGC AAC TAC CGC GAT GTG CGC TTC GAG TCC ATC CGG CTC      292
68 Gln Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu
69      55      60      65
70 CCT GGC TGC CCG CGC GGC GTG AAC CCC GTG GTC TCC TAC GCC GTG GCT      340
71 Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala
72 70      75      80      85
73 CTC AGC TGT CAA TGT GCA CTC TGC CGC CGC AGC ACC ACT GAC TGC GGG      388
74 Leu Ser Cys Gln Cys Ala Leu Cys Arg Arg Ser Thr Thr Asp Cys Gly
75      90      95      100
76 GGT CCC AAG GAC CAC CCC TTG ACC TGT GAT GAC CCC CGC TTC CAG GAC      436
77 Gly Pro Lys Asp His Pro Leu Thr Cys Asp Asp Pro Arg Phe Gln Asp
78      105      110      115
79 TCC TCT TCC TCA AAG GCC CCT CCC CCC AGC CTT CCA AGC CCA TCC CGA      484
80 Ser Ser Ser Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg
81      120      125
82 CTC CCG GGG CCC TCG GAC ACC CCG ATC CTC CCA CAA TAAAGGCTTC      530
83 Leu Pro Gly Pro Ser Asp Thr Pro Ile Leu Pro Gln
84      135      140      145
85 TCAATCCGC      539
86 (2) INFORMATION FOR SEQ ID NO: 2:
87      (i) SEQUENCE CHARACTERISTICS:
88          (A) LENGTH: 165 amino acids
89          (B) TYPE: amino acid
90          (D) TOPOLOGY: linear
91      (ii) MOLECULE TYPE: protein

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/677,152

DATE: 01/24/2002
TIME: 14:58:50

Input Set : A:\SEQUENCE LISTING.txt
Output Set: N:\CRF3\01242002\I677152.raw

92 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
93 Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Ser Met Gly
94 -20 -15 -10 -5
95 Gly Thr Trp Ala Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile
96 1 5 10
97 Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
98 15 20 25
99 Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Thr Arg Val
100 30 35 40
102 Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
103 45 50 55 60
104 Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
105 65 70 75
106 Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
107 80 85 90
108 Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
109 95 100 105
110 Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala Pro
111 110 115 120
112 Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
113 125 130 135 140
114 Pro Ile Leu Pro Gln
115 145
116 (2) INFORMATION FOR SEQ ID NO: 3:
117 (i) SEQUENCE CHARACTERISTICS:
118 (A) LENGTH: 14 amino acids
119 (B) TYPE: amino acid
120 (D) TOPOLOGY: linear
121 (ii) MOLECULE TYPE: peptide
122 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
123 Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln
124 1 5 10
125 (2) INFORMATION FOR SEQ ID NO: 4:
126 (i) SEQUENCE CHARACTERISTICS:
127 (A) LENGTH: 10 amino acids
128 (B) TYPE: amino acid
129 (D) TOPOLOGY: linear
130 (ii) MOLECULE TYPE: peptide
131 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
132 Leu Gln Gly Val Leu Pro Ala Leu Pro Gln
133 1 5 10
134 (2) INFORMATION FOR SEQ ID NO: 5:
135 (i) SEQUENCE CHARACTERISTICS:
136 (A) LENGTH: 7 amino acids
137 (B) TYPE: amino acid
138 (D) TOPOLOGY: linear
139 (ii) MOLECULE TYPE: peptide
140 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
141 Gly Val Leu Pro Ala Leu Pro

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/677,152

DATE: 01/24/2002

TIME: 14:58:50

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\01242002\I677152.raw

```
142      1      5
143 (2) INFORMATION FOR SEQ ID NO: 6:
144      (i) SEQUENCE CHARACTERISTICS:
145          (A) LENGTH: 13 amino acids
146          (B) TYPE: amino acid
147          (D) TOPOLOGY: linear
148      (ii) MOLECULE TYPE: peptide
149      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
150      Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys
151      1      5      10
152 (2) INFORMATION FOR SEQ ID NO: 7:
153      (i) SEQUENCE CHARACTERISTICS:
154          (A) LENGTH: 11 amino acids
155          (B) TYPE: amino acid
156          (D) TOPOLOGY: circular, linear
157      (ii) MOLECULE TYPE: peptide
158      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
159      Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser
160      1      5      10
161 (2) INFORMATION FOR SEQ ID NO: 8:
162      (i) SEQUENCE CHARACTERISTICS:
163          (A) LENGTH: 13 amino acids
164          (B) TYPE: amino acid
165          (D) TOPOLOGY: linear
166      (ii) MOLECULE TYPE: peptide
167      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
168      Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro
169      1      5      10
170 (2) INFORMATION FOR SEQ ID NO: 9:
171      (i) SEQUENCE CHARACTERISTICS:
172          (A) LENGTH: 12 amino acids
173          (B) TYPE: amino acid
174          (D) TOPOLOGY: linear
175      (ii) MOLECULE TYPE: peptide
176      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
177      Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro
178      1      5      10
179 (2) INFORMATION FOR SEQ ID NO: 10:
180      (i) SEQUENCE CHARACTERISTICS:
181          (A) LENGTH: 11 amino acids
182          (B) TYPE: amino acid
183          (D) TOPOLOGY: linear
184      (ii) MOLECULE TYPE: peptide
185      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
186      Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro
187      1      5      10
188 (2) INFORMATION FOR SEQ ID NO: 11:
189      (i) SEQUENCE CHARACTERISTICS:
190          (A) LENGTH: 10 amino acids
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/677,152

DATE: 01/24/2002
TIME: 14:58:50

Input Set : A:\SEQUENCE LISTING.txt
Output Set: N:\CRF3\01242002\I677152.raw

```

191         (B) TYPE: amino acid
192         (D) TOPOLOGY: linear
193     (ii) MOLECULE TYPE: peptide
194     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
195     Val Leu Gln Gly Val Leu Pro Ala Leu Pro
196         1             5             10
197 (2) INFORMATION FOR SEQ ID NO: 12:
198     (i) SEQUENCE CHARACTERISTICS:
199         (A) LENGTH: 14 amino acids
200         (B) TYPE: amino acid
201         (D) TOPOLOGY: linear
202     (ii) MOLECULE TYPE: peptide
203     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
204     Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys
205         1             5             10
206 (2) INFORMATION FOR SEQ ID NO: 13:
207     (i) SEQUENCE CHARACTERISTICS:
208         (A) LENGTH: 9 amino acids
209         (B) TYPE: amino acid
210         (D) TOPOLOGY: linear
211     (ii) MOLECULE TYPE: peptide
212     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
213     Leu Gln Gly Val Leu Pro Ala Leu Pro
214         1             5
215 (2) INFORMATION FOR SEQ ID NO: 14:
216     (i) SEQUENCE CHARACTERISTICS:
217         (A) LENGTH: 8 amino acids
218         (B) TYPE: amino acid
219         (D) TOPOLOGY: linear
220     (ii) MOLECULE TYPE: peptide
221     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
222     Gln Gly Val Leu Pro Ala Leu Pro
223         1             5
224 (2) INFORMATION FOR SEQ ID NO: 15:
225     (i) SEQUENCE CHARACTERISTICS:
226         (A) LENGTH: 10 amino acids
227         (B) TYPE: amino acid
228         (D) TOPOLOGY: linear
229     (ii) MOLECULE TYPE: peptide
230     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
231     Leu Gln Gly Val Leu Pro Ala Leu Pro Gln
232         1             5             10
233 (2) INFORMATION FOR SEQ ID NO: 16:
234     (i) SEQUENCE CHARACTERISTICS:
235         (A) LENGTH: 11 amino acids
236         (B) TYPE: amino acid
237         (D) TOPOLOGY: linear
238     (ii) MOLECULE TYPE: peptide
239     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/677,152

DATE: 01/24/2002

TIME: 14:58:51

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\01242002\I677152.raw

L:2 M:220 C: Keyword misspelled or invalid format, [(1) GENERAL INFORMATION:]
L:6 M:220 C: Keyword misspelled or invalid format, [(ii) TITLE OF INVENTION:]
L:21 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:22 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:33 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:41 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:47 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1
L:57 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1